

Fieldworking from Home: Models, minerals, ecologies and cultures of media history

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Over the past eight years I have developed a research methodology that focuses on multimodal listening in encounters with media infrastructures. I approach the practice of listening as something which can be both auditory and nonauditory; as much a process of cultural technique as an affective response to external stimulus.

My research predominantly took place in the context of fieldwork. I would listen to media infrastructure. I would listen as my footsteps crunched through the snow around the perimeters of giant Icelandic cryptocurrency mines, or as I strolled past fibre optic telecom cabinets in Rome. I would try to attune to the hums of wireless radio masts in rural Ireland, the drips of water inside a high frequency trading data centre located in an industrial estate outside of London. During these visits I listened to the people who worked in and around these spaces, too, their stories, testimonials, and the histories of these technologies.

Description

Following the temporary end of travel and the order to 'stay at home' as a result of the Covid-19 pandemic, I was forced to abort over a year's worth of planning for site specific fieldwork. As our homes became sanctuaries from the 'out-there' risk of the pandemic, how would fieldwork adapt? What does fieldwork sound like for a fieldwork researcher who has no access to their chosen field?

I needed to adapt and find a way to continue engaging with the places I research but I didn't know how to achieve this whilst confined to the same room that I ate, slept and worked in. *Fieldworkingfromhome* is the eventual response to the conditions I found myself in. An

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exploration of the sites and re-imagined sounds of the field I would no longer have access to, distilled into a series of HO (1:87) miniature scale models.

During the initial height of the pandemic, the tabletop miniature figurine fantasy war-game company Games Workshop became a stock market success story as miniature gaming enthusiasts doubled down and consolidated their armies in a quest for fantasy, escapism, and world making. Following the traditions of world making through miniatures, scale models and dioramas, this project explores the sanctuary of home as a place for encountering the field beyond. The processes of model making made it possible for me to continue encountering the world I wanted to explore, and to keep asking questions, remaining curious about each place's particularities, its histories and its communities, through building, re-imagining and listening.

HO.1 (Île de Ré)



Dimensions: 600x410x170mm

Medium: *Teloxys aristata*, lichen, potassium sodium tartrate tetrahydrate, birch ply, extruded polystyrene, shungite, card, plaster, sand, soil, acrylic, epoxy, balsa.

Description:

During the First World War a French scientist named Paul Langevin began to experiment with a crystal called Rochelle salt (potassium sodium tartrate tetrahydrate). He placed electrodes on specimens, submerged them underwater and found that they would produce voltage fluctuations when sounds were made in the water. A simple salt crystal was demonstrated to have huge piezoelectric potential. It became the basis for sonar technology. Piezoelectric crystals such as Rochelle salt and quartz are still critical crystal elements in computing and other electronic technologies. They are also popular within metaphysical, crystal healing and wellness markets.

Meanwhile, the Île de Ré, a small island just off the coast of La Rochelle, where the original salt crystals were made, is a major site for artisanal, high grade sea salt production. Salt is the earliest mineral commodity. Of the annual global production of around two hundred million tonnes of salt, about 6% is used for human consumption. The remainder is used in industrial processes.

I had been invited by a local salt farmer and museum to produce fieldwork during a short residency on the Île de Ré in 2020. Unfortunately due to travel restrictions and the ongoing effects of the pandemic, I wasn't able to attend.

HO.2 (Bodedern)



Dimensions: 390x210x320mm

Medium: *Teloxys aristata,* lichen, coconut fibre, birch ply, extruded polystyrene, card, plaster, sand, soil, acrylic, epoxy, stereo sound and HD video (duration 13min 15sec)

Description:

In December 2019, just before the start of the pandemic, a mass bird death incident occurred on the island of Anglesey, North Wales. Hundreds of starlings were found mysteriously dead along a small stretch of single track country road a few kilometres outside the town of Bodedern. Video footage and photos taken by a nearby resident reached national news platforms as people questioned how and why this happened.

Mass bird death disasters occur surprisingly frequently. Records of such incidents date back to the mid-Victorian period when a series of unexplained incidents occurred in the North East of England. The 2019 incident was the first of its kind within the UK since the proliferation of social media.

Alarmed residents began an online movement expressing concern that the installation of a new 5G testbed antenna in nearby Llandudno may have had something to do with the incident. The claims were fuelled by a global community of anti-electromagnetic radiation / anti-wireless campaigners. Local police, academics and biologists were quick to reject such claims, suggesting it was more likely that a bird of prey frightened the murmuration mid-flight.

I planned to visit the space and began researching the location with the intention to travel in March 2020. However, I postponed my trip due to stay-at-home orders at the start of the pandemic. Meanwhile, communities of conspiracy theorists continued to use the case as an example demonstrating that 5G was in-part responsible for the spread of Covid-19. As a result, several network engineers were assaulted in the street and a number of mobile telecommunication towers were set alight in the West Midlands and Merseyside.

HO.3 (Portheurno / Comfortless Cove)



Dimensions: 410x310x170mm

Medium: *Teloxys aristata*, lichen, birch ply, extruded polystyrene, card, plaster, sand, soil, acrylic, epoxy

Description:

In the late nineteenth century, the remote beach at Porthcurno, Cornwall, became internationally famous as the British termination point for early submarine telegraph cables, the first of which was landed in 1870. This was part of an early international link stretching all the way from the UK to India, at the time held as a British colony.

In 1872, the Eastern Telegraph Company (ETC) Limited was formed and took over the operation of the cables, building a cable office in Porthcurno valley. The cable hut, where the cable shore ends were connected to their respective landlines, is a listed building and still stands at the top of the beach. In the Inter-War years, the Porthcurno cable office operated as many as 14 cables, for a time becoming the largest submarine cable station in the world, with the capacity to receive and transmit up to two million words a day.

To this day, Porthcurno is a major site for the termination of fibre optic subsea data cable. Over 99% of the world's internet traffic travels via fibre optic cables even though the average consumer experience of the Internet is almost entirely wireless. During the lockdowns associated with the COVID-19 pandemic, our homes became our sanctuaries as the country coped with work-from-home orders. Our ability to work from home in order to combat a global pandemic was largely possible due to the global subsea fibre optic cable network.

The undersea volcano that erupted near Tonga on January 14, 2022 damaged all fibre optic subsea cables reaching the island, leaving residents disconnected from the outside world. This disaster highlighted how dependent nations have become upon this largely unseen network of 1.3 million kilometres of subsea fibre optic cable.

Following several months of being assured that the image I based this work on was of Porthcurno, I discovered it to be of Comfortless Cove on the South Atlantic island of Ascension. Ascension Island is a critical infrastructure site for the maintenance of the British Empire's colonial communication network. Comfortless cove was a Cable & Wireless telegraph landing station. Its name came from it also being a mass grave site for sailors who died of Yellow Fever whilst serving under the West Africa Squadron, a British naval taskforce assigned to catching ships transporting slaves illegally from Africa to colonies in the Americas.

HO.4 (Zazhoginsky)



5

Dimensions: 600x410x240mm

Medium: *Teloxys aristata*, Birch ply, extruded polystyrene, shungite, card, plaster, sand, soil, acrylic, epoxy, balsa.

Description:

Where do we find sanctuary in troubled times? Can we find it in our homes? Can we find sanctuary in a necklace, a pendant, a gemstone? In late 2019 I was invited to attend the CEC Back Apartment Residency in St Petersburg, Russia. The residency would take place in June 2020. I had also begun to develop relationships with a team of geologists based in Petrozavodsk, in the northern Russian region of Karelia. Alongside the geologists, I had begun to coordinate a month-long project in the field to study the community that mines, prepares, sells, exports and distributes a rare and hyperlocal mineral called shungite.

Shungite has a high carbon content, and is actively used in metallurgy as a substitute for coke in the smelting of iron and steel. However, precisely because of its high carbon content, New Age practitioners have come to consider shungite a magic stone with healing properties. In the past few years, the crystal has taken the multibillion-pound global wellness industry by storm. Its capacity to de-ionize electromagnetic radiation from wireless transmissions (an effect also peer-reviewed by scientists within university research centres) is seen as one of this mineral's particular strengths. This de-ionization only works effectively when contained within electromagnetically-shielded materials. A number of celebrities, including Eamonn Holmes, at the time the UK's highest earning breakfast TV presenter; Calum Best, celebrity son of former footballer; M.I.A., acclaimed musician; and Harry Kane, footballer and captain of England's national team, have all endorsed a moratorium on wireless radiation during the pandemic and supported the use of electromagnetically-shielded 'wearable anti-tech' clothing and devices which often claim to use shungite to protect individuals from radiation. These items are often both expensive and ineffective.

HO.5 Tullisaaren puisto



HO.5

Dimensions: 405x260x140mm

Medium: *Teloxys aristata*, Birch ply, extruded polystyrene, coconut fibre, card, plaster, sand, soil, acrylic, balsa, mixed fibres, loudspeaker with electronics, lithium rechargeable battery.

Description:

Apis mellifera ligustica is an Italian subspecies of the European honeybee. It is a popular species of bee amongst beekeepers throughout Europe. Many subspecies of bee produce honey to feed themselves. Honeybees are prolific honey producers. Workers spend their entire lifespan foraging for pollen and nectar to feed their colonies, build their homes and care for their young. The honey is the bees' food, and the beekeepers' harvest. Beekeepers must maintain a fine ecological balance between cultivating and caring for their bees, and harvesting their honey, or else they risk colony collapse.

Honeybees do not have ears. Instead, they listen to vibrations from the hertzian world through the hairs on their bodies. They navigate complex mappings across their broad habitats, foraging, searching and extracting pollen and nectar surrendered/offered by plants, throughout blossoming periods. They communicate their findings, the best forage sites, by a series of navigation dances or 'waggle dances'. These dances are thought by some to be a response to the environmental conditions, the topography, but also the invisible (to humans) electromagnetic spectral topography. Some suggest that honeybees – a critically important species for crop pollination and a key marker of biodiversity in ecosystems – are susceptible to alterations in the hertzian space of the electromagnetic realm. As such, some have raised concerns that electromagnetic telecommunication technologies such as 5G endanger the lives of honeybees across the world, and therefore endanger biodiversity and crops. Some beekeepers have taken to including

dustings of the mineral shungite at the entrance of their hives so that the bees may collect them onto their bodies through the electrostatic charge of their legs and bodies.

As a member of the research collective *Mehiläisten seura* (The Bee Company) I have been remotely exploring the lifeworlds of bees, asking what a multidisciplinary artist collective can learn from non-human ways of living, working and being creative. When you walk through a park, do you notice the bees? Do you count or record how many honeybees you see? Perhaps how many bumble bees? What does a public park mean to you, and what might it mean to the amateur beekeepers of Tullisaari Park, a large public park on the suburban island of Lajasaalo, Finland? Lajasaalo is a suburb of Helsinki that has been shaped in the western European tradition of the sublime landscape gardens that came to prominence from 1710-1800. It includes cultivated and heavily manicured lawns, winding, frequently-mowed paths, and non-native flowers. From a distance, I wonder about the relationships between human beekeepers, bee humankeepers, and the entanglement of pollination, aestheticism, technology, and cultivation within European parklands.

Works Cited

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SEO Excerpt